

In a chemical decontamination method and a chemical decontaminating system for chemically decontaminating radioactive nuclides from a metallic material surface

5 contaminated by the radioactive nuclides, the method
comprise the processes of reductively decontaminating using
a reductive decontaminating agent containing at least two
kinds of components; and then decomposing the reductive
decontaminating agent using a decomposing apparatus for
10 decomposing at least two kinds of chemical substances in
the reductive decontaminating agent. In addition, a
chemical decontaminating system, which comprises a catalyst
decomposition column in an upstream side of an ion exchange
resin column and a hydrogen peroxide injection apparatus in
15 a further upstream side in order to reduce an amount of
waste products caused by a chemical decontaminating agent
in a case where a mixed decontaminating agent for a
composition trapped in a cation-resin column and for a
composition trapped in an anion exchange resin is used for
20 the chemical decontaminating agent, and in order to
selectively decompose the composition trapped in a cation
resin column in an inlet side of a cleaning apparatus when
radioactive nuclides in the decontaminating agent are
cleansed using the cation resin column during
25 decontaminating and decompose the both compositions after
completion of decontaminating process. The present
invention provides a chemical decontamination method using

Further, the present invention provides a chemical
5 decontamination method which moderates corrosion of
material by using a chemical decontaminating agent
decomposing apparatus capable of decomposing not only the
components trapped by the cation exchange resin but also
components trapped by an anion exchange resin at a time.